## **DNC Talking Points**

February 23, 1995

- I'm going to start off this morning with some statistics that will shock you:
  - The U.S. ranks 28th in the world in percent of government spending on non-defense R&D. Every other G7 country beats us.
  - We rank 19th in corporate investment in R&D. The only other G7 nation below us is the United Kingdom. And U.S. corporate spending is dropping it fell 1.6% between 1988 and 1992. Today, industry is talking about cutting back even more.
- "Well," you say, "The country is tight financially right now. We probably can't afford any more R&D." Wrong. That's another myth we hear that America is maxed out and overburdened by taxes.
  - We pay the least percent of GDP in taxes than any other G7 country. We're 23rd in the world.

- We're 33rd in corporate taxes.
- We're 22nd in personal income taxes. France is the only G7 country below us.
- The notion that we're tapped out and can't afford to invest in the future is a myth. We can't afford not to. Our trade balance is proof of what happens when we stop investing in R&D that drives technology:
  - We have an approx. \$138B trade deficit
    the worst of all the G7 countries.
    Japan has a \$120B surfeit.
- It may surprise you, but the space and aeronautics program is one of the few ways America does invest in the future. We build the nation's future in five ways:
- 1.) The promise of long-term opportunity for future generations.
  - Sustained long-term economic growth. Major breakthroughs in science and technology make this possible. How many other programs look one or two or three decades out?

- Better understanding of our environment.
- Establishing that abundant resources will be available centuries from now.
- Open space frontier to commercial enterprise.
- 2.) Intellectual nourishment.
  - Cal State L.A. -- high minority population -- I went there on a Saturday, auditorium and overflow room filled. These kids were excited about it.
  - Between July 15 and October 31, last year, 2.4 million people logged on to Internet to look at Shoemaker-Levy.
- 3.) Provide hope we don't live in a closedplanetary system. Keep Malthus in the grave.
- 4.) Inspiration for future generations that there's more to life than T.V. and Nintendo.
- 5.) Space program can be a catalyst to bring humans together on this planet.

• Space exploration looks toward the future, plants the seeds for our children's harvest.

- Yes, today's needs are pressing. but canceling the space program won't solve today's problems. The total investment in space world-wide is less than a fraction of a percent of the planet's GDP.
- America's children need us to make an investment in their future to prepare them and the nation for the 21st Century.
  - U.S. children rank 13th in math and science test scores.
  - Recent story in the Washington Post where auto execs can't find qualified technicians. Dealerships spend up to \$50,000 on high-tech equipment to diagnose car problems, but can't find enough people trained to do it.

GM Chairman John Smith was quoted as saying, "We've got a problem here because the education system in this country is not turning out people for the jobs of the future."

- He's right. And the second piece is that there must be jobs for our children to go to. NASA creates jobs and expands industries. Let me give you a few examples:
  - NASA has a tremendous impact on the aviation industry, which generates \$100 billion a year and employs over 1 million people in high quality jobs.
  - We're developing technology to support a supersonic aircraft that could go from L.A. to Tokyo in 4 1/2 hours. Could generate \$250B in sales and create more than 150,000 jobs.
  - NASA is doing cutting-edge work in environmentally clean technologies could be a \$300 billion market by the year 2000.
  - In 18 months, NASA Marshall created or saved 5,300 jobs and had an impact on the economy of more than \$358 million.
  - Thanks to the revolutionary things NASA's doing in remote sensing and the transference of that technology to industry, we believe the market could go from today's \$800M a year to \$8B a year.

- Look at how NASA has impacted individual companies:
  - Two years ago, a New Hampshire company created a computer code to help NASA research semiconductor growth, combustion and heat transfer in Shuttle experiments. NASA invested \$550,000 in the project. The company made \$14 million in world-wide sales.
  - A California company produced a system for NASA JPL to pinpoint locations on Earth within 1 millimeter. It was used on the Persian Gulf in 1991 and for measuring movements during earthquakes. The company plans to market it for aviation and commercial boating. A whole new industry was launched.
  - A company called Irvine Sensors worked with NASA to develop a 3-D stacking technology for integrated circuits. IBM has licensed the technology, and Irvine Sensors expect the venture with IBM to be worth tens of millions of dollars to them.

- Technology NASA developed to strip thermal protection from the Shuttle's solid rocket boosters now is being used by airlines to strip off paint and other coatings. Delta estimates it's saving them \$40,000 a week. This water-jet method also is environmentally friendly.
- NASA, a Vermont company, and others together found a way to remove the lead from maple syrup. The process brings the lead level way below 1996 targets. The company now is seeking licensing rights to commercialize it. This could have a significant effect on the New England economy and reap big revenues for the company.
- NASA strengthens the nation's economic future and competitiveness.
- There will always be political pressure to cut investments in technology development and other R&D. To worry only about today and ignore tomorrow. That's why we have the deficit we have -- we've been willing to steal our children's future:
  - When the President first took office, the deficit was \$221.3B. Through painful

cutting, it's now projected at \$192.5B for FY 1995.

- Our government leaders talk about getting the deficit down so our children aren't burdened with our debt. And they're right. But our children need more than just the absence of debt. They need jobs, new industries and the ability to compete in the global market.
- NASA is an important way the nation does that. We're an unbeatable investment in America's future.